

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding Policies,)	
Procedures and Rules for the California Solar)	R.06-03-004
Initiative, the Self-Generation Incentive Program)	
and Other Distributed Generation Issues.)	
_____)	

**REPLY COMMENTS OF AMERICANS FOR SOLAR POWER
REGARDING UPDATED PROPOSAL FOR THE CALIFORNIA SOLAR
INITIATIVE AND SUPPLEMENTAL QUESTIONS**

In accordance with the May 9, 2006 Administrative Law Judge’s Ruling with Modification to Staff Proposal and Additional Guidance on Comments due May 15, 2006 (“ALJ Ruling”), Americans for Solar Power (“ASpv”) submit the following reply comments. Per the ALJ Ruling, the following reply comments are organized by subject in the same order as the Staff Report.

I. Introduction

ASpv addresses below a number of issues raised in the opening comments of various parties to this proceeding. There are three crucial points that should be highlighted.

First, the Commission should not wait until it issues a final decision on the CSI program as a whole before authorizing funding and staffing for start-up tasks. The most critical start-up task is developing a web-based system for application processing and data accumulation. This system needs to be up and running statewide on January 1, 2007. In order for that to happen, the Commission needs to start the process now.

Second, ASPv urges the Commission to be realistic in its program implementation decisions. The good intentions and cautious assumptions underlying the Staff’s proposal for incremental implementation of a pure PBI rate for large customers is understandable,

but the proposed “hybrid” phase in is cumbersome and complicated compared to a simple shift over to PBI for the >100 kW program.

Lastly, the current transitional state of the market, along with backlogs in applications, shortages in materials, and lack of information regarding customer response to current market changes (including the decrease in commercial rebates just approved at yesterday’s Commission meeting) make it difficult to recommend with certainty appropriate EPBB rebate and PBI incentive levels for 2007. ASPv and some other parties have made proposals based on information available to date, but the question of rebate levels and incentives will need to be examined based on real time information.

II. Program Objectives

A. Administrative scale-up.

ASPv agrees with SDREO that the Commission needs to begin the process of establishing parameters for and seeking bids on application and data accumulation systems as soon as possible.¹ There is no greater administrative risk within the CSI program than not being able to process applications and provide real time data on the progress of the CSI program. While some other aspects of the CSI program can be sorted out over time, this item needs to be an immediate priority and if necessary should be authorized through an interim decision. The number of applications processed through the residential retrofit CSI program beginning in 2007 will be on a different scale than the SGIP program. The Commission can and should initiate the process of obtaining the necessary infrastructure without waiting to make a final decision on the administrator.

¹ SDREO Opening Comments at 12-13.

B. The Commission has a critical need for accurate data reflecting real projects.

As several parties note in opening comments, up-to-date and detailed program subscription data is necessary in order for the Commission to make key decisions regarding allocation of funding and rebate levels, and for market participants to plan for changes.² In the absence of complete information, many parties (including ASPv) are finding it difficult to address with confidence some of the most important questions posed in the Staff Report. The opening comments seem to reflect a range of carefully qualified and conditional recommendations and a number of parties note the need for ongoing evaluation of the market and adjustment of incentive levels up or down to address changes in the market as necessary.

Without a basic understanding of how many customers are committed to purchase systems at a particular rebate level, it is difficult to provide a reasoned recommendation of how funding should be allocated between programs and what the rebates should be for 2007. We have some information, but it is not complete and it is not reliable, given the number of applicants that are dropping out prior to actually committing to purchase solar installations. This problem is discussed below. However, it highlights the absolutely critical need for transparent, up-to-date and reliable program data that is based on actual

² See e.g. Joint Solar Parties Opening Comments at 11-12; Sun Light and Power Co. Opening Comments at 7-10. See also Californians for Renewable Energy (“CARE”) Opening Comments recommending that Staff provide “a general prediction of funding levels and kilowatt/megawatt increases” and “incentive funding levels for each year and consequent growth in California’s solar capacity under different incentive and market reaction scenarios....” CARE Opening Comments at 8-9. ASPv agrees, but unfortunately the data needed for the kind of analysis CARE requests is not currently available, and attempting such analysis on the basis of anecdotal information and extrapolation is likely to yield erroneous results.

contracts that have secured panels and not merely initial applications with refundable deposits.³

ASpv specifically recommends that the application processing and data accumulation program developed for use beginning January 1, 2007 should include all relevant public data on completed, active and wait list applications including, size, application holder, location, module, inverter, application dates, progress dates, interconnection date, approval dates, payment date, size of payment and rebate amount per watt or kWh posted in real time within 24 hours.

ASpv also continues to believe that applicants should be required to provide proof (in the form of contract or equivalent evidence of binding obligation) that panels have been secured in order to receive a confirmed reservation. In addition, ASPv supports SDREO's recommendation for a non-refundable application fee to address the drop out problem and send a signal discouraging applications from projects not likely to be completed.⁴

C. The Commission should clarify that the program goal is maximum output and retail competitiveness.

PG&E and SCE have suggested in their opening comments that the EPBB orientation factors should encourage west-facing orientation in order to increase production during the IOUs' peak periods.⁵ PG&E Opening Comments at 6-7; SCE Opening Comments at 7. This proposal should be rejected because encouraging west-facing rather than (or as

³ ASPv appreciates ALJ Duda's taking the first step in this direction by providing at page 4 of the Proposed Decision approved at the May 25, 2006 Commission meeting that the Program Administrators must update the public website daily when reservations are within 20 percent of the trigger point, and recognizing the need for consistent information.

⁴ SDREO Opening Comments at 7.

⁵ PG&E Opening Comments at 3-4; SCE Opening Comments at 7.

an equal alternative to) south-facing installation would result in less output under CSI overall.

There appears to be no dispute that output from PV is maximized when panels are oriented to the south. With south-facing orientation, PV provides a significant contribution during peak periods. But peak production should not be the overriding goal, and should not dictate key performance factors such as panel orientation.⁶ The Commission needs to clarify that, while PV provides peak shaving benefits, the program objective is to obtain maximum output per dollar of program investment, in order to lower installed cost of PV systems and bring them to retail competitiveness over the next decade.

III. CSI Incentives

A. Incentives for >100 kW

ASpv agrees with parties advocating direct move to PBI for all large commercial installations under the CSI.⁷ As several parties have explained, a pure PBI payment will ensure that rebates are based on output, will eliminate opportunities for cheating, and will cost less than EPBB (or a hybrid) to administer.⁸ PBI also encourages innovation by rewarding increased output.⁹ ASPv remains convinced that a pure PBI approach for the large commercial market is workable and much simpler from an administrative point of

⁶ The Commission has traditionally understood the important distinction between peaking resources and other resources that contribute to meeting peak demand but are not purchased solely for that purpose. Likewise, as a matter of state policy the Commission has separate programs supporting both demand side management, which are aimed specifically at peak shaving, and energy efficiency programs, which are designed to reduce *overall* energy demand.

⁷ See SCE Opening Comments at 4-6; PG&E Opening Comments at 6; Consumer Federation Opening Comments at 4, 19-21.

⁸ See Fat Spaniel Technologies, Inc. Opening Comments at 9-13 (discussing benefits of using PBI/metered output); Consumer Federation of California (“Consumer Federation”) Opening Comments at 4 (“Payments based on actual measured use will provide an incentive to monitor effectiveness and do necessary maintenance.”)

⁹ See Attachment 1, Declaration of Benjamin S. Collinwood.

view than a hybrid. A significant portion of the world market is moving in this direction, and California should too.¹⁰

It appears that parties advocating a more gradual phase in or hybrid approach are mainly motivated by a desire to avoid market disruption. ASPv believes such concerns are either based on misunderstanding or can be addressed through careful attention to program administration and ensuring that rebates are set at the right level.

For example, the Joint Solar Parties are concerned that a pure PBI for large commercial customers would “force all but the largest system owners to rely solely on third-party system ownership....”¹¹ It is ASPv’s understanding that that most projects >100kW are already being third party financed (which is different from “third party ownership”). Many customers prefer third party financing, for a variety of reasons. Today there are a variety of financial products available to support investment in solar installations by both private and public entities. It is expected that financing options will be further expanded if PBI is adopted.

The other concern cited by parties advocating a gradual transition is the fear that a sudden change in the pricing mechanism will raise fears of market disruption and scare off new customers. However, it is important to realize that the current backlog in the application processing queue will provide a *de facto* transition. In December 2005 the Commission added \$200 million in funding for the SGIP backlog and \$100 million for 2006 projects.¹² This backlog is likely to extend beyond 2006. ASPv agrees with Consumer Federation that customers who have reservations based on the current

¹⁰ See Attachment 2, “European PV Association’s Position Paper on a Feed-In Tariff For Photovoltaic Solar Electricity.”

¹¹ Joint Solar Parties Opening Comments at 22.

¹² D.05-12-044.

incentive structure can be grandfathered in to minimize market disruption in the move to PBI.¹³

Moreover, if the >100 kW PBI rates are correctly calibrated to the level of the capacity-based EPBB rates offered to customers in the <100 kW market, there should be no concern about establishing an unfair difference in payment levels between customers slightly above and below 100 kW.

To address the latter issue, ASPv has slightly revised the PBI rates proposed in its opening comments to 39 cents/kWh CEC-AC for 2007. This number corresponds to the rebate levels ASPv is recommending below for <100 kW customers paid under the EPBB system.

10-Year PBI Program: 10-Year Declining PBI Pay-out Schedule (\$/kWh)

Pay-out Year	Initial Year of Operation*									
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1	0.390	0.325	0.255	0.400	0.320	0.250	0.180	0.120	0.060	0.030
2	0.390	0.325	0.255	0.400	0.320	0.250	0.180	0.120	0.060	0.030
3	0.390	0.325	0.255	0.400	0.320	0.250	0.180	0.120	0.060	0.030
4	0.390	0.325	0.255	0.400	0.320	0.250	0.180	0.120	0.060	0.030
5	0.390	0.325	0.255	0.400	0.320	0.250	0.180	0.120	0.060	0.030
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

To be clear, these relatively low proposed PBI rates are not a negotiating position. They are based on what we know about the current market and assume that customers are buying systems at the new \$2.50/W rate. The rates assume optimized design, plus predicted customer response to the incentive under PBI to optimize location, orientation,

¹³ Consumer Federation Opening Comments at 19; *see also* SCE Opening Comments at 6.

etc. Most importantly, ASPv believes incentive levels should be reviewed periodically and calibrated up or down based on market forces, including information regarding customer response to the most recent adjustments in rebate levels.

B. Incentives for <100 kW

Having reviewed the opening comments of other parties and available (albeit incomplete) information from SGIP project managers, ASPv has adjusted its proposed incentive levels for the <100 kW program as follows:

Comparison of current rebate with ASPv proposed EPBB optimized system

	Current Rebates	ASPv EPBB Rebate(Optimized Design)	Expected Rebate under ASPv proposal
Residential	\$2.80/W CEC AC	\$3.11/W CEC AC ¹⁴	\$2.80/W
Commercial	\$2.50/W CEC AC	\$2.78/W CEC AC ¹⁵	\$2.60-\$2.70

For the same reasons discussed above with respect to the proposed rates for PBI, ASPv wants to be clear that this recommendation is conditioned on ongoing review and analysis per the process suggested below.

¹⁴ If the Commission uses the Staff's proposed "system" AC rating, adjust the proposed \$3.11/watt AC CEC by .9 (this results in \$3.46/w "system" AC).

¹⁵ If the Commission uses the Staff's proposed "system" AC, adjust the proposed \$2.78/watt AC CEC by .9 (this results in \$3.09/w "system" AC).

C. Ongoing review and analysis.

The commercial PV market in the middle of transition, with systems being installed in 2006 at either \$3.50/W (backlog customers) or \$2.80 W (new 2006 confirmed reservations) and potentially at a \$2.50/W level (per the Commission's decision yesterday, May 25, 2006, affirming ALJ Duda's April 24, 2006 ruling). Reflecting this fact and the lack of clear information on program response at various rebate levels, a number of parties have recognized in opening comments that the Commission must incorporate a review process into whatever decisions are made in the proceeding regarding rebates for both commercial and residential systems in 2007. To that end ASPv suggested in its opening comments that a working group that includes representatives from all classes of interested parties meet in November of each year, including 2006, to review updated program information and if necessary make appropriate adjustments in incentive levels to ensure that the CSI program's fundamental objectives are not lost to faulty forecasting on the basis of insufficient or out-of-date information.¹⁶

ASPv further recommends that the Commission schedule a final workshop *prior* to issuing its proposed decision in this proceeding (currently scheduled for July, 2006) in order to update information discussed in comments. This is an unorthodox proposal, but the current unsettled state of the market (including product constraints, speculative nature of the waiting list, high drop out rates, refundable deposits) plus the lack of data on response within each service territory to very recent incentive changes, including yesterday's decision affirming the ALJ's reduction of the rebate level to \$2.50, has put

¹⁶ Joint Solar Parties similarly recommend that the Commission establish an inclusive CSI working group. Joint Solar Parties at 38-40.

the Commission in a difficult position. It is extremely important that decisions regarding rebate levels made between now and January 1, 2007 be based on the best available information, and reviewed in an all-party workshop involving regulators, program administrators and industry participants.

To ensure that the workshop proposed above is a useful exercise and not just a debate based on speculation, the Commission should instruct program administrators to update all relevant program information and make it available to parties before the workshop. Among other things, the Commission needs to understand whether the current requirement for a confirmed reservation is ensuring that projects in the queue are real, or if they are proving to be speculative. In order to inform this workshop, ASPv also recommends that the ALJ formally poll the SGIP program administrators on their recommendation for incentive levels, given that they have been closer to market participants and have better access to program data than other parties. This information should be made public before the workshop. Other participants should likewise be invited to share relevant information and market analysis.

If the Commission holds the workshop described above this summer and the working group meets again in November, the Commission will at least have done its best to ensure that whatever rebate levels and incentive rates are adopted for 2007 reflect any changes in the market or new information. Further review and adjustments will certainly be required over time in order to maintain balance in the market.

D. AC Rating

The EPBB rates proposed above for the <100 kW program assume existing CEC AC ratings. As noted above and in ASPv's Opening Comments, the CEC AC rating

approach has serious shortcomings when used as a means of estimating actual system output, but at this point it is better for use in an EPBB calculation than the untested and complicated “system” AC rating proposed by Staff. Other parties’ opening comments support ASPv’s position on this issue.¹⁷

The Commission needs to acknowledge that *both* the current CEC AC rating and “system” AC rating approaches are flawed as a means of predicting actual output. First, the CEC AC inverter ratings have proven inaccurate when compared to the actual performance of inverters. *See* Declaration of John Berdner (Attachment 3).

Unfortunately, the proposed “system” AC approach does not address this problem.

Second, the CEC AC module ratings are incapable of estimating output from newer PV technologies such as BIPV and bifacial modules. *See* Declaration of Benjamin S. Collinwood (Attachment 1). Again, the proposed “system” AC approach does not address the fundamental problem, which is that the rating method does not account for the approximately 10-15 percent increase in electrical output provided by the second side of bifacial installations (tests show that this increase could be as much as 20% with optimal siting and installation).

ASPv supports use of the EPBB approach in the less than 100 kW market. If the EPBB calculations are properly designed they should reward optimal system design, installation, orientation and shading. The Commission should stick with the CEC AC rating system for systems under 100 kW for the reasons discussed above. However, the Commission should also authorize PBI as an option for innovative technologies such as bifacial panels. The Commission should *not* spend its time and resources developing a new “system” AC rating system. If such a system is desired, it should not be

¹⁷ *See* Joint Solar Parties Opening Comments at 21.

implemented until a verification protocol has been developed, vetted and approved by the Commission. The Commission should transition as rapidly as possible to paying customers based on metered output for systems >100 kW. This approach ensures that payments reward actual production. By happy coincidence, it is also the payment methodology that will be simplest to administer, most cost-effective in use of staff resources, and easiest to verify.

IV. Funding Levels

There appears to be relatively solid support among commenting parties for a 50/50 division of funding between the commercial and residential programs. Using this assumption and the Staff's proposed allocation among the IOU service territories, ASPv's recommended budget allocation is summarized below:

	3. Total Funding Requirement									
Initial Year of Operation*	Total Direct Incentives Budget	Admin Costs	Total Annual Funding Available to Projects	Interest Earned on Escrow Account	Cumulative Rolling Funding Carried Forward	Direct Incentive Sub-Totals			Average Cost to CA Retail Consumers (\$/kWh)	
						Commercial (Larger than 10 kW)	Residential New Home	Residential (Smaller than 10kW)		
2007	\$280,000,000	\$45,000,000	\$235,000,000	4.0%	\$100,255,629	\$75,368,659	\$14,126,112	\$84,000,000	\$0.00093	
2008	\$280,000,000	\$45,000,000	\$235,000,000	\$4,010,225	\$189,808,899	\$68,450,203	\$21,652,240	\$80,850,000	\$0.00092	
2009	\$280,000,000	\$45,000,000	\$235,000,000	\$7,592,356	\$266,353,701	\$59,628,204	\$27,838,594	\$83,160,000	\$0.00091	
2010	\$280,000,000	\$45,000,000	\$235,000,000	\$10,654,148	\$295,754,099	\$112,290,261	\$35,792,478	\$89,100,000	\$0.00090	
2011	\$280,000,000	\$45,000,000	\$235,000,000	\$11,830,164	\$291,402,390	\$126,462,619	\$44,740,597	\$92,584,913	\$0.00089	
2012	\$280,000,000	\$45,000,000	\$235,000,000	\$11,656,096	\$261,972,248	\$137,495,624	\$53,688,717	\$96,787,359	\$0.00088	
2013	\$280,000,000	\$45,000,000	\$235,000,000	\$10,478,890	\$217,670,234	\$144,535,400	\$60,399,806	\$92,652,994	\$0.00086	
2014	\$280,000,000	\$45,000,000	\$235,000,000	\$8,706,809	\$168,794,404	\$142,608,262	\$41,474,534	\$106,174,746	\$0.00085	
2015	\$280,000,000	\$45,000,000	\$235,000,000	\$6,751,776	\$123,797,703	\$124,782,229	\$28,202,683	\$120,331,379	\$0.00084	
2016	\$280,000,000	\$45,000,000	\$235,000,000	\$4,951,908	\$3,181,201	\$82,299,526	\$14,383,368	\$84,957,293	\$0.00083	
Subtotals:	\$2,800,000,000	\$450,000,000	\$2,350,000,000			\$1,073,920,988	\$342,299,128	\$930,598,683		
Avg. Annual Totals (2007-2016)	\$280,000,000	\$45,000,000	\$235,000,000	\$107,392,099	\$34,229,913	\$93,059,868	\$0.00079			
			\$2,800,000,000	TOTAL FUNDING REQUIREMENT (2007-2025)						
* Reflects actual payment schedule: incentives and rebates will be reserved 6 months to 1 year prior to being paid.										

The underlying spreadsheet is appended as Attachment 4.

V. Incentive Administration

A. Opening comments show that there is broad support for a non-profit administrator.

ASPV continues to strongly support an independent non-profit administrator for the CSI program. No party's opening comments have offered any convincing argument to counter the clear benefits of obtaining an administrator that is independent of self-interest or potential conflicts of interest, and that has a demonstrated commitment to solar and the ability to perform administrative tasks.

As SDREO and the Northern California Solar Energy Association ("NorCal") correctly point out,¹⁸ an independent non-profit administrator provides numerous benefits over IOU administration, including:

Freedom from conflicting objectives. Staff has stated correctly that the program administrator should have a "demonstrated history of supporting solar development and innovation in California, and without perceived or inherent conflicts to discourage solar installations."¹⁹ ASPv agrees with the opening comments of NorCal (at 2-3) that an IOU administrator would have both perceived and inherent conflicts, given the IOUs competing priorities.

Efficiency and cost. ASPv agrees with the parties that have pointed out in opening comments that a non-profit administrator will almost certainly operate more efficiently and at a lower cost than an IOU or private sector administrator.²⁰ A non-profit focused on program administration within clear budget parameters will have clear incentives to maximize efficiency while minimizing administrative costs. ASPv shares the concern of

¹⁸ See NorCal Opening Comments at 1-4; SDREO Opening Comments at 8-9.

¹⁹ Staff Report at 44.

²⁰ NorCal Opening Comments at 3-4.

other parties that IOU administrators have been slow in performing basic programmatic tasks such as processing applications and administering payments. This increases customer and program costs. SDREO, in contrast, has performed well in trying to minimize delay and streamline bureaucratic processes. ASPv recommends that in addition to selecting an independent non-profit administrator, the Commission establish clear performance objectives for program management. For example, the late payment problem (which is a serious issue for small dealers and manufacturers, and increases program costs), by establishing explicit requirements for processing payments (net 30 days would be reasonable) and pay interest at market rates for late payments.

Data collection and reporting. As parties have pointed out in opening comments, the IOUs have been reluctant to share data and slow in disseminating program information.²¹ ASPv agrees with this observation and views this as an important reason for the Commission to adopt the Staff's recommendation to seek a non-profit CSI administrator.

B. The Commission should move ahead with non-profit administrator selection process.

While an issue has been raised regarding a potential impact of non-profit administration on tax exemption, no party has provided any convincing evidence that the issue is ultimately likely to derail the Staff's recommendation for selecting a non-profit administrator for the CSI small residential/commercial program. Moreover, as SDREO notes, the fact that SDREO is currently functioning in a similar capacity is good evidence that there is likely no problem.²²

Therefore, ASPv recommends that the Commission obtain clarification on the tax exemption issue if necessary, but continue to move forward with the selection process in

²¹ NorCal Opening Comments at 2,4.

²² SDREO Opening Comments at 11-12.

accordance with the recommendation in the Staff Report, with two important exceptions. First, as discussed in ASPv's opening comments, the Advisory Panel for administrator selection (see Staff Report at 46) should include at least one representative of the solar industry. In addition, ASPv agrees with NorCal that the selection of a non-profit administrator should *not* be delegated to PG&E.²³

VI. Conclusion

ASPv appreciates the Commission's ongoing efforts to create an effective integrated CSI program. ASPv views the process as an ongoing process, and is available to discuss the issues addressed above and in ASPv's opening comments.

Respectfully submitted,

By: _____

Jan E. McFarland
Executive Director
Americans for Solar Power
1100 11th Street, Suite 323
Sacramento, CA 95113
916-346-7578
janmcfar@sonic.net

By: _____

Lynn M. Haug
Ellison, Schneider & Harris, LLP
2015 H Street
Sacramento, CA 95814
916-447-2166
lmh@eslawfirm.com

²³ NorCal Opening Comments at 5.

PROOF OF SERVICE

I declare that:

I am employed in the County of Sacramento, State of California. I am over the age of eighteen years and am not a party to the within action. My business address is ELLISON, SCHNEIDER & HARRIS; 2015 H Street; Sacramento, California 95814-3109; telephone (916) 447-2166.

On May 26, 2006, I served the attached *Reply Comments of Americans for Solar Power Regarding Updated Proposal for the California Solar Initiative and Supplemental Questions* by electronic mail or, if no e-mail address was provided, by United States mail at Sacramento, California, addressed to each person shown on the attached service list.

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed on May 26, 2006, at Sacramento, California.

Ron O'Connor

aes@cpuc.ca.gov
as2@cpuc.ca.gov
cln@cpuc.ca.gov
dks@cpuc.ca.gov
dot@cpuc.ca.gov
dsh@cpuc.ca.gov
jf2@cpuc.ca.gov
lp1@cpuc.ca.gov
rmd@cpuc.ca.gov
rmd@cpuc.ca.gov
suh@cpuc.ca.gov
tam@cpuc.ca.gov
tdp@cpuc.ca.gov
vjb@cpuc.ca.gov

amber.dean@sce.com
andy.vanhorn@vhcenergy.com
arno@arnoharris.com
atrowbridge@downeybrand.com
bjeider@ci.burbank.ca.us
bkc7@pge.com
bmcc@mccarthyllaw.com
carriec@greenlining.org
case.admin@sce.com
CEM@newsdata.com
cfaber@semprautilities.com
chrishilen@dwt.com
chrism@mid.org
cmanzuk@semprautilities.com
cmkehrein@ems-ca.com
cp@kacosolar.com
cpucosolar@rahus.org
Dan.Thompson@SPGsolar.com
david.kopans@fatspaniel.com
david@pvnow.com
deb@a-klaw.com
diane_fellman@fpl.com
doug.larson@pacificorp.com
e.larsen@rcmbiothane.com
ek@a-klaw.com
ekgrubaugh@iid.com
eshafner@solel.com
eyussman@knowledgeinenergy.com
filings@a-klaw.com
freedman@turn.org
fsmith@sflower.org
gary@sunlightandpower.com
George.Simons@itron.com
ghinners@reliant.com
GLBarbose@LBL.gov
glw@eslawfirm.com
gmorris@emf.net
gpickering@navigantconsulting.com
grant.kolling@cityofpaloalto.org
gyee@arb.ca.gov

hchoy@isd.co.la.ca.us
hfhunt@optonline.net
irene.stillings@sdenergy.org
JILy@pge.com
janmcfar@sonic.net
jennifer.porter@sdenergy.org
jewilson@energy.state.ca.us
jgalloway@ucsusa.org
jhamrin@resource-solutions.org
jharris@volkerlaw.com
jimross@r-c-s-inc.com
jjensen@kirkwood.com
jluckhardt@downeybrand.com
johnredding@earthlink.net
jpross@votesolar.org
jsqueri@gmssr.com
jtt8@pge.com
julie.blunden@sunpowercorp.com
jwiedman@gmssr.com
jwmctarnaghan@duanemorris.com
jwwd@pge.com
jyamagata@semprautilities.com
karen@klindh.com
keith.mccrea@sablau.com
kjsimonsen@ems-ca.com
kmills@cbbf.com
ksmith@powerlight.com
l_brown123@hotmail.com
LATc@pge.com
lex@consumercal.org
lfultz@unlimited-energy.com
lglover@solidsolar.com
liddell@energyattorney.com
lmerry1@yahoo.com
lnelson@westernrenewables.com
LowryD@sharpsec.comi
lpark@navigantconsulting.com
lurick@sempra.com
MABolinger@lbl.gov
markgps@sbcglobal.net
mday@gmssr.com
mdjoseph@adamsbroadwell.com
meganmmyers@yahoo.com
mhyams@sflower.org
michaelboyd@sbcglobal.net
michaelkyes@sbcglobal.net
michaely@sepcor.net
mike.montoya@sce.com
mjskowronski@inlandenergy.com
mkay@aqmd.gov
mluevano@globalgreen.org
MNCe@pge.com
mrw@mrwassoc.com
mscheibl@arb.ca.gov
mshames@ucan.org

mstout@unlimited-energy.com
nathalie.osborn@sdenergy.org
nellie.tong@us.kema.com
nes@a-klaw.com
nonyac@greenlining.org
npedersen@hanmor.com
obrienc@sharpsec.com
ofoote@hkcf-law.com
paul.kubasek@sce.com
pepper@cleanpowermarkets.com
phillip_mcleod@lecg.com
pnarvand@energy.state.ca.us
ppettingill@caiso.com
rhwiser@lbl.gov
rishii@aesc-inc.com
rjl9@pge.com
rkmoore@gswater.com
rmccann@umich.com
robert.pettinato@ladwp.com
robertg@greenlining.org
rod.larson@sbcglobal.net
roger.pelote@williams.com
rschmidt@bartlewells.com
sarahtuntland@yahoo.com
sberlin@mccarthylaw.com
scott.tomashefsky@ncpa.com
scottanders@sandiego.edu
sendo@ci.pasadena.ca.us
sfrantz@smud.org
slins@ci.glendale.ca.us
sls@a-klaw.com
spatrick@sempira.com
ssmyers@att.net
stephen@seiinc.org
steve@energyinnovations.com
susan.freedman@sdenergy.org
susank@bonair.stanford.edu
susan-munves@smgov.net
tmorita@thelenreid.com
tomb@crossborderenergy.com
tomhoff@clean-power.com
tony.foster@itron.com
traceydrabant@bves.com
vfleming@navigantconsulting.com
vschwent@sbcglobal.net
wwwesterfield@stoel.com

MARY SIMMONS
SIERRA PACIFIC POWER COMPANY
PO BOX 10100
RENO NV 89520-0026

HARVEY M. EDER
PUBLIC SOLAR POWER COALITION
1218 12TH STREET, NO. 25
SANTA MONICA CA 90401

AKBAR JAZAYEIRI
SOUTHERN CALIFORNIA EDISON
COMPANY
PO BOX 800
2244 WALNUT GROVE AVE. ROOM 390
ROSEMEAD CA 91770

STEVE RAHON
SAN DIEGO GAS & ELECTRIC COMPANY
8330 CENTURY PARK COURT, CP32C
SAN DIEGO CA 92123-1548

DAVID J. COYLE
ANZA ELECTRIC COOPERATIVE, INC
58470 HIGHWAY 371
PO BOX 391090
ANZA CA 92539-1909

ROBERT MARSHALL
PLUMAS-SIERRA RURAL ELECTRIC
CO-OP
PO BOX 2000
73233 HIGHWAY 70 STE A
PORTOLA CA 96122-2000

CALIFORNIA ENVIRONMENTAL
PROTECTION
PO BOX 2815
SACRAMENTO CA 95812-2815